(April 4, 2009) Support for Federal Funding for Local Projects

Building Customer Service Capacity for Serving Customers with Disabilities

Request: $50,000

The West Suburban Chamber of Commerce and Industry Foundation

9440 West Joliet Road

Hodgkins, IL 60525

The funding would be used to develop programs that enhance understanding and capacity for service workers who interact with individuals with disabilities.

This project proposes to fill a gap in the understanding and capacity that front line service employees have in dealing with persons with disabilities through the creation of informational and education materials. This would consist of a DVD training program on serving customers with disabilities that would be made widely available.

***

Building Renovation Project for Senior Services, La Grange, IL

Request: $355,000

Aging Care Connections (formerly SWSCOA)

111 West Harris Avenue

La Grange, IL 60525

The funding would be for the environmentally friendly renovation of the existing senior services facility.

Aging Care Connections (formerly SWSCOA) is the designated provider of Title III services of the Older Americans Act

administered through the Department of Health and Human Services, Administration on Aging. As a part of the national Aging Services Network, Aging Care Connections is the only organization in our service area selected to offer federal and state sponsored programs for older adults and their caregivers. Aging Care Connections has been offering federally funded services for seniors since 1974 and has consistently met the high standards required by the Administration on Aging, Illinois Department on Aging and the Area Agency on Aging (AgeOptions), as evidenced through program and fiscal compliance reviews on a regular basis.

As the number of older adults continues to grow (and subsequently the number of adult children who are thrust into the role of caregiver), requests for assistance to the organization on how to manage care in the home continually increase on a daily basis. By 2030, there will be about 71.5 million older persons or one in every five Americans. The 85+ population is projected to increase to 6.1 million in 2010 and 7.3 million in 2020. In our local area, older adults and their families depend on Aging Care Connections to provide information, assistance, guidance and support for the myriad of issues facing an aging society. Investing taxpayer money in helping seniors to remain independent in their own homes is a much more cost effective way of providing care and an endorsement of our community's commitment to aging well.

***

Catholic Charities Long Term Green Housing

Request: $750,000

Catholic Charities Housing Development Corporation

721 North LaSalle Street

Chicago, IL 60654

The funding is for the planning and construction of an advanced long-term skilled-care facility for seniors which would serve as a pilot project for the state of Illinois.

Catholic Charities Housing Development Corporation has made a real contribution to the plan to provide affordable, safe, housing for seniors in Cook County, Illinois. The Catholic Charities Green House project would truly help people transform the lives of seniors and families of seniors who require long-term skilled -care in a residential facility. The pilot project would be a State model for long-term, skilled-care housing that will be replicated in other communities.

***

Center for the Science of Animal Well-Being (C-SAW) Zoological Veterinary Medicine Professional Training Programs

Request: $500,000

Chicago Zoological Society/Brookfield Zoo

3300 Golfview Road

Brookfield, IL 60513

This request would help sustain and strengthen several innovative professional training programs for zoological and aquatic veterinary medicine.

There is a national shortage of zoological veterinary professionals for employment at zoos and aquariums, government agencies, and/or research facilities. Chicago Zoological Society's C-SAW programs offer veterinary students innovative training programs and exposure to cutting edge veterinary medical practices - including high tech diagnostics and treatment. The advances made in this field by current and future professionals will improve veterinary care at the participating institutions; protect and preserve endangered species; and help advance understanding in controlling and preventing the spread of diseases like West Nile Virus, Chronic Wasting Disease, and other zoonotic diseases of interest to human health professionals as well as veterinarians.

As zoos increasingly serve as a haven for a growing number of endangered species, qualified zoo veterinarians are of utmost importance. With more than almost 220 zoos and aquariums accredited by the Association of Zoos and Aquariums in the United States, the demand for expertise in zoological medicine is enormous. This expertise is also in demand for wildlife medicine programs in parks and protected areas. There are few opportunities to gain hands-on experience with a vast array of mammals, birds, and reptiles, and such programs are highly competitive and limited. The Center for the Science of Animal Well-Being's Zoological Veterinary Medicine Professional Training Programs provide

training for those who are entering the zoological veterinary science field, whether they become zoo or wildlife vets, academic researchers in comparative animal medicine and/or zoonotic disease as it relates to human health, or enter government service.

***

City of Hickory Hills, Police Department

Request: $125,000

City of Hickory Hills

8652 W. 95th Street

Hickory Hills, IL 60457

The Hickory Hills Police Department's 9-1-1 Center provides a crucial link between citizens requesting police services, improves the management of critical incidents involving both man-made and natural disasters, and facilitates radio interoperability communications for first responders. Funds would be used to replace outdated computers, communication consoles, radio equipment, and necessary contingency back up power supply equipment.

The equipment utilized in the Police Department's 9-1-1 Center helps to facilitate recommendations provided through the National Incident Management System. In the event of a natural or man made disaster this equipment would be essential to the operation of the City's Emergency Operation Center as part of the City's Disaster Plan. Technological improvements to 9-1-1 equipment will enhance the ability of first responders from multiple agencies to coordinate efforts and establish vital radio communications. This enhanced ability will provide safety and protection to all citizens affected by a disaster or critical incident. The addition of new equipment will also improve the efficiency of police methods that are utilized in providing protection and services to the community.

***

City of Hickory Hills Wastewater Infrastructure Improvement

Request: $500,000

City of Hickory Hills

8652 W. 95th Street

Hickory Hills, IL 60457

This project would help to reduce sewer overflows into streets, public waterways, and commercial buildings.

Sanitary sewers are designed to only carry wastewater from homes or businesses. Due to the aging, existing system, the infiltration of rainwater through deteriorated joints, broken sewers and cross connections add clear water to sewer systems, often filling the sanitary sewer systems to capacity. Once this happens, water will flow backward through the sanitary sewer pipe, flooding basements, and causing manholes to discharge releasing wastewater onto the street.

The construction would consist of the repair and rehabilitation of sanitary sewers. Repair and rehabilitation can include a variety of methods, but generally this project will make use of existing video, performed by the City of Hickory Hills, that isolates sections of sewer in need of repair. The video tape will provide visual evidence of leaking joints, cracked clay sewer pipe, protruding taps, and illegal cross connections. Repair methods will consist of point repairs (isolated sections of sewer that are so badly cracked, they need to be replaced in their entirety) and cured in place sewer lining.

The cured-in-place lining process involves inserting a resin-saturated flexible lining into the existing sewer. Air or water is forced into the tube, which causes it to fit tightly to the existing sewer walls. The resin hardens, completing the curing process. When the curing process is completed, a new pipe has been created that is free of cracks and holes that allow rainwater and roots to enter the sewer and cause operational problems such as stoppages and overflows.

The inability of the existing sanitary sewer to contain raw sewage puts public health at risk and violates state and federal environmental regulations. Sanitary sewer overflows release wastewater and potential pathogens onto streets, into

waterways, and basements increasing potential health risks. As wastewater overflows into creeks, rivers, lakes, and streams it contaminates all bodies of water fed by the waterways and all creatures/plants coming in contact with the polluted water.

There are various costs associated with inflow and infiltration, including local cleanup to sanitary sewer system overflow a well as additional costs needed for wastewater treatment. Overflow costs are associated with road and waterway cleanup and the potential for fines if the overflow problem is not corrected. Additionally, sewer system backups into basements or households can result in litigation and potential liabilities for the responsible city or agency. Eventually, new homes or businesses may not be allowed to connect to the sanitary sewer system if the inflow and infiltration issues are not corrected, lowering housing values due to the inability to develop land for future growth.

Inflow and infiltration costs water treatment facilities and consumers large amounts of money in operating expenses. All water entering a water treatment facility must be treated as wastewater causing an increase in operating costs proportional to the amount of clean water entering the sanitary sewer system due to inflow and infiltration. Costs associated with processing the added clean water from inflows and infiltration are eventually passed back to the consumer in the form of rate increases. By reducing inflow and infiltration capital and operating costs can be lowered. Minimizing inflow and infiltration can also increase the lifetime-capacity of a treatment facility and wastewater transportation system.

***

Chicago Transit Hub (Circle Line - Ogden Streetcar), IL - Alternatives Analysis

Request: $3,000,000

Chicago Transit Authority

567 W. Lake

Chicago, IL 60661

The funding would be used towards completion of alternatives analysis for the Circle Line Project.

As one of major transportation hubs in the United States, Chicago roadways are very congested. This project will alleviate some of that congestion by extending a successful rapid transit line to customers in an area lacking this kind of transit service. Funding for this project would be in accord with the FTA's support of locally planned and operated mass transit systems throughout the United States.

The Chicago Transit Hub (Circle Line - Ogden Streetcar) Project, which is currently in Alternative Analysis, will connect the existing CTA Orange Line near Ashland with the existing Pink Line Cermak Branch near 18th Street. Also, the project will connect the CTA Red and Brown Lines near North/Clybourn with the existing CTA track, and structure near Lake/Paulina. The project will also add new CTA and Metra transfer stations along new and existing CTA tracks to the northwest, west, southwest, and south of Chicago's Central area. A new rail yard facility and rolling stock will also be added. This project has received previous appropriations of $6 million in FY2009 under the New Starts Section 5309, $3.9 million in FY2008 under the Alternative Analysis Section 5339, $1 million in FY2006 under the New Starts section 5309, $4.4 million in FY2004 under the Non-New Starts Section 5309, $27 million in FY2003 in Formula Funding section

5307.

***

Cook County Environmental Infrastructure (COOK COUNTY, IL)

Request: $1,000,000

U.S. Army Corps of Engineers (Chicago District)

111 N. Canal Street

Chicago, IL 60606

The Cook County Environmental Infrastructure fund works to modernize, enhance, and improve Cook County's aging environmental infrastructure system.

This project specifically provides technical planning, design and construction assistance to non-federal interests who have environmental infrastructure needs in Cook County, Illinois. Projects include the development and protection of water supply and waste water systems; combined sewer overflows; and remediation of adverse water quality impacts and storm water impacts to waste water systems.

***

Countryside Street Repair

Request: $500,000

City of Countryside

5550 East Avenue

Countryside, IL 69525

The funding would be for the repair of various streets, including Kensington Avenue, 61st Street, 57th Street, as well as others.

This street repair project will help improve the movement of traffic through the region, improve safety, and create good paying local jobs. Roads in good condition are an important contributor to economic development and are an important contributor to the local housing market.

***

Diamond MEMS Sensors for Real-Time Sensing of Weaponized Pathogens

Request: $2,500,000

Advanced Diamond Technologies, Inc.

429 B Weber Road # 286

Romeoville, IL 60446

The funding would be used to develop a wearable sensor to detect weaponized pathogens utilizing the unique properties of diamond.

This project will address the two major problems with current systems used to detect weaponized chemical and biological pathogens. First, compact and reliable devices for first responders or warfighters to detect weaponized pathogens simply do not exist despite years of research and a clearly increasing need to protect these individuals. Second, pathogen-detecting sensor technologies that are currently available use materials that are inherently unstable which leads to unreliable operation.

The unique properties of diamond can solve these problems. ADT's diamond technology has outstanding electrochemical properties, which, in addition to its other unique properties, translates into high-sensitivity for real-time detection. Diamond is also extremely hard, resistant to wear and chemically and biologically inert, providing a stable platform for detection devices that will not deteriorate over time or with repeated use. Success in this project would have enormous pay offs, and the societal benefits will be substantial-ranging from improved safety for our warfighters to improved response times in hazardous material or environmental situations-through rapid detection of airborne pathogens and chemicals. ADT, as a small business, would not be able to fund this project on its own. Federal funding will provide a critical infusion of resources, allowing ADT to adapt its unique technology to help defend our country against chemical or biological attack both at home and abroad.

The purpose of the project is to develop a wearable sensor to detect weaponized pathogens utilizing the unique properties of diamond. ADT's patented diamond technology will be used as a platform to enable a new class of compact, wearable chemical and biological point sensors, with unprecedented sensitivity, stability, and reproducibility. These sensors would be extremely compact and capable of monitoring the presence of pathogen molecules in real time. The unique properties of ADT's diamond technology will overcome the limitations of current pathogen detection technologies. ADT will develop chemical and biological sensors that are scalable and can be integrated with emerging micro-technologies as well as embedded in fabrics.

***

E-Beam Free Form Repair Qualification

Request: $5,000,000

Sciaky, Inc.

4915 W 67th Street

Chicago, IL 60638

The funding would be used to assist in enabling the widespread qualification and certification of EBFFF for cost efficient "repair of DOD weapon system components" and other military infrastructure

Across the Department of Defense, the impact of corrosion and wear on DOD platforms, vehicles, weapons systems and support equipment is estimated to cost $10-$20 billion per year. Successful development of this program will help to enable the widespread qualification and certification of Electron Beam Free Form Fabrication (EBFFF) for repair of DOD weapon system components and the successful transfer of technology to DOD Organic Depots, weapon system OEMs, and Military Repair Service Centers. Successful implementation will ensure substantial cost savings for the DOD, as well as improved overhaul logistics through the elimination of expensive parts inventories, as well as platform downtime when waiting for new or replacement parts.

A significant and growing portion of the US Defense Budget is currently allocated to the maintenance and overhaul of military equipment being used far beyond its expected service life. The inadequacy of traditional repair technologies often

forces the military to dispose of worn or damaged components, which must then be replaced with expensive spare parts. In many cases, the original equipment manufacturer drawings are no longer available, making it difficult to locate replacement parts through the materiel supply chain, or directly with the weapon system manufacturer since many weapon systems remain in service far beyond their intended life. Using Electron Beam Free Form Fabrication (EBFFF) can reverse this trend. EBFFF is a next generation free form fabrication technology that has demonstrated that it can cost-effectively repair or replicate many high value weapon system components that would otherwise be scrapped. EBFFF can also form quality replacement parts at the site of the repair, and generate significant cost savings and supply chain logistics advantages. However, the dynamics of downsizing and budget constraints prevent the steps necessary for rapid deployment of EBFFF solutions within our military infrastructure. Funding of this project has the potential to significantly reduce cost associated with the repair and replacement of DOD platforms, vehicles, weapons systems.

***

Emergency Generator Replacement

Request: $150,000

Village of La Grange Park

447 N. Catherine Avenue

La Grange Park, IL 60526

The funding would be used to replace a 30-year old generator that provides power to the emergency communications center and various portions of the fire department.

Replacement of the existing generator with a new generator (and related equipment) would ensure reliable emergency power supply to crucial first responder functions and maintain communications during power outages. Police and Fire Departments are dispatched for the Village's communications center. Additionally, the communications center is the heart of the Village's capacity to communicate and maintain contact with first responders in the field. These funds will go directly to providing for the safety and security of the residents of La Grange Park and surrounding communities.

***

Employment Opportunities Pre-Apprenticeship Program/ Small Business Development Program

Request: $260,000

Hispanic American Construction Industry Association

901 W. Jackson Blvd.

Suite 205

Chicago, IL 60607

The funding would be used to conduct a comprehensive employment and apprenticeship training for construction industry trade opportunities (Employment Opportunities Pre-Apprenticeship Program), as well as and skill development programs for small businesses and entrepreneurs (Small Business Development Program).

The Employment Opportunities Pre-apprenticeship Training Program will include an eight week comprehensive review of the construction industry and will help participants determine which construction trade or apprenticeship program to pursue as a career. Primary construction trades will be emphasized during the course of the training. Industry professionals, including HACIA members will provide presentations and will be encouraged to consider qualified participants for future employment. Trade union representatives and vocational institution representatives will be

encouraged to participate by conducting classes.

With the Small Business Development Program (SBD), HACIA will offer customized training workshops to assist entrepreneurs and small businesses develop the necessary skills that will enable them to maintain or expand into new business markets. This program will deliver up-to-date management advice, training and information to help business owners make sound decisions and to assist potential owners in getting started on the right foot as they begin to build capacity to perform on the Prime level. The SBD Program will also address methodologies associated with Green Building and assist the contractors with the technical portion associated with the bidding and estimating of Green Building projects.

These programs will enable individuals to develop the necessary skills to secure good-a paying job or expand their small business.

***

Health and Physical Education Program

Request: $160,000

Valentine Boys and Girls Club of Chicago

3400 South Emerald

Chicago, IL 60616

The funding would be used to help prevent obesity and promote healthy development through physical fitness programs, sports activities and nutritional workshops for youth in Chicago.

Obesity is a major health problem with both genetic and environmental causes among youth today. The Valentine Boys & Girls Clubs of Chicago promotes healthy development by fostering in youth a sense of competence, a sense of usefulness, and a sense of belonging.

A daily fitness regime will be created for youth ages 6-18 which will consist of segments of exercise in the following areas.

Aquatic: Learn to Swim, Swim Team, Underwater Hockey, CPR Training, and Life Guarding.

Game Room: Billiards, Foosball, Ping Pong, and Board Games.

Fitness Center: They will also instruct the youth in beginning and advanced strength training with free weights. Cardiovascular method training will be used on the treadmills, stationary bikes and rowing machines.

Gymnasium: Aerobic exercise will also be introduced with the instruction of various sports such as Basketball, Volleyball, Football and Floor Hockey.

Finally, a healthy nutrition will be instilled into the daily eating habits of the youth by offering health workshops. They are youth led in which our Keystone & Torch Club participants educates the youth on various topics such as "Eat to Live, Not Live to

Eat," "Eating Disorders," and "Truth about Fast Foods."

This program will reinforce the benefits of good exercise/fitness habits on growth, mental well-being and overall healthy lifestyles.

***

HOFFMAN DAM, IL

Request: $200,000

U.S. Army Corps of Engineers (Chicago District)

111 N. Canal Street

Chicago, IL 60606

Funding would be used to move forward with PCA execution and design completion/next phase of this project.

The project will alleviate the ill effects of three low-head dams along the Des Plaines River near the Villages of Riverside and Lyons, Illinois. These dams no longer serve their original purpose or create recreational pools and currently impede the migration of fish, impair water quality and have converted riverine habitat to stagnant reservoir habitat to stagnant reservoir habitat. Additionally, the dams annually create a safety hazard for river users resulting in fatal accidents of recreational boaters. The proposed project seeks to remove the Armitage and Fairbanks dams and to notch the Hofmann dam in order to restore riverine conditions. This project has moved through the feasibility report state (12/2006); the Project Cooperation Agreement is complete. Design and implementation were put on hold due to lack of Federal and non-federal funding.

This project will advance the efforts to improve water quality in a highly urbanized area as well as improve safety to those users of the river as a recreational asset. This river was key in the expansion of the nation; restoring it will ensure its health long term.

***

Illinois Energy Resources Center at the University of Illinois at Chicago

Request: $2,000,000

University of Illinois at Chicago (Energy Resources Center / Mechanical and Industrial

Engineering)

842 West Taylor

Room 2039 ERF

Chicago, IL 60607

The funding would be used expand the efforts of the Energy Resources Center at the University of Illinois at Chicago to provide unbiased, objective and comprehensive information and technical assistance on energy efficiency, renewable energy and sustainable economic development throughout the Midwest and fulfills a mandate explicitly stated in EPACT as a responsibility of the U.S. Department of Energy, which is not currently funded.

The effort will assists in the implementation and installation of existing and new technologies to reducing energy costs, waste and pollution reduction. More importantly this effort will work with business, industrial, commercial and residential customers to encourage cost effective investments in energy efficiency and renewable energy capital projects. This effort

will include specific information on:

- Energy Efficient Design
- Energy Assessments for Industrial and Institutional Clients
- Total Resource Management for Industrial Clients
- Combined Heat and Power Applications
- Energy Efficient Buildings and Indoor Air Quality
- Renewable and Alternative Energy Systems
- Advanced HVAC Research and Technology Development, and Tech Transfer
- Anaerobic Digesters and on Farm Clean Electricity Production
- Aggregation of Consumers and Bulk Energy Purchasing Efforts
- Residential Energy Efficiency Projects and Incentives
- LED and Other Advanced Lighting Technologies
- State, Utility, and Local Government energy efficiency incentive programs
- Market Transformation Programs
- USDOE, USEPA and USDA Energy programs, Incentives and Best Practices.
- Biofuels Information and Incentives
- Dissemination of Energy Research
- Outreach and educational programs on the importance of transforming non-food lingo-cellulosic raw materials such as switchgrass, popular trees, forest waste, agricultural residues and algae to renewable fuels.
- Dissemination of methods to improve the efficiency of solar cells.

The College of Engineering at the University of Illinois at Chicago, through its Energy Resources Center as a part of the Department of Mechanical and Industrial Engineering and affiliated Departments and Schools including the Departments of Chemical and Electrical and Computer Engineering, which has complimentary expertise and will also play a key role in the attaining the overall objectives of the proposed program has the capabilities and expertise to utilize these additional resources to greatly expand current efforts to promote the economic and environmental benefits of cost effective investments in proven and cutting edge energy efficiency and renewable technologies. The overall goal of this effort will be to accelerate the market transformation for proven energy saving products and investments, while encouraging the early adoption of new and developing technologies.

Federal energy security, energy reliability, and economic and environmental concerns all dictate that the United States and its businesses and citizens strive to reduce energy usage, adopt cost effective renewable systems. In order to achieve this goal, citizens must have access to reliable, unbiased, and objective information. Increasing energy costs, spot shortages and supply concerns, and an increasingly volatile energy markets dictate a need for federal support for state, local and regional action plans.

The USDOE, USEPA, the national labs and other federal and State entities have developed many effective tools and practices to assist in promoting these goal. This effort will advance these laudable federal goals by accelerating the tech transfer and adoption of these new technologies throughout the Midwest. Encouraging and supporting cost effective investments in energy capital improvements will create jobs, improve the local and regional economies, improve energy security, and improve the environment. A regional approach to providing necessary technical assistance and unbiased information is a prudent and effective use of federal funds.

***

Illinois Nanotechnology Collaborative

Request: $195,000

Illinois Science and Technology Coalition

200 East Randolph, Suite 2200

Chicago, IL 60601

The funding would support efforts of the Illinois Science and Technology Coalition to establish the Illinois Nanotechnology Collaborative (INC). The INC would break down barriers and establish new collaborative channels in the field of nanotechnology by: developing strategies to improve business access to nanotechnology infrastructure, promoting Illinois assets, and identifying policy changes that may benefit nanotechnology businesses.

Each year, the federal government invests more than $1 billion in nanotechnology research and related activities. As Congress works to advance the National Nanotechnology Initiative Amendments Act of 2009 in order to strengthen federal nanotechnology policy, it is necessary at the state level to ensure that new pathways are forged to ensure federal resources translate to increased economic opportunity. This project seeks to accomplish this objective and will enhance the ability to start or grow nano-businesses in Illinois.

According to the publication Small Times, Illinois is the number two state in the country when it comes to the dollar value of nanotechnology research. However, when it comes to the density of nanotechnology firms, Illinois is not even among the top 10 states. These facts point to the dramatic disconnect between research and commercial application. The outcome of this proposal will be a detailed blueprint on methods for enhancing collaboration in Illinois' nanotechnology community, including specific strategies to make it easier for small businesses to share infrastructure (thus reducing start-up costs) and enjoy greater access to the deep research infrastructure in the state (thus providing a greater return on federal investments).

***

Justice-Willow Springs Water Commission Archer Avenue Construction and Pump Station Renovations

Request: $500,000

Justice-Willow Springs Water Commission

7000 South Archer Avenue

Justice, IL 60458

The funding would be used to purchase pumps and other upgrades which would provide clean, safe water to over 31,000 area residents.

The existing 1.0 MG above ground reservoir was constructed in 1964 and will reach the end of its projected design life in 2014. Two (2) 1.0 MG underground reservoirs are to be constructed adjacent to the existing underground reservoirs on site. These new reservoirs will replace the existing 1 MG above ground reservoir and supplement existing system storage requirements. Adequate storage capacity is critical to municipal water systems in order to maintain supply during emergencies. As part of the pump station renovation, two (2) additional high service pumps will be added to those installed in 2009 as part of a modernization and replacement program. All of the pumps and motors in the older pump station building are in need of replacement or major rebuilding.

These pumps are the sole source of water delivery for the Water Commission. The new pumps will be more energy efficient and will help meet peak demands of the system as well as provide the required redundancy in emergencies should other pumps fail.

***

National Center for Food Safety and Technology, IL (Project and Language Request)

Request: $3,800,000

Report Language:

"The Committee recognizes the contributions which the National Center for Food Safety & Technology is making towards ensuring the security and safety of the nation's food supply. The Committee therefore directs the Food & Drug Administration to fund the National Center through their cooperative agreement at a level of not less than $3.8 million."

Illinois Institute of Technology

10 West 33rd Street

Chicago, IL 60616

The funding would be used to conduct FDA's food defense research initiative and additional research on recovery and prevention technology.

NCFST is a food safety research center funded in part over the past 20 years through a cooperative agreement with the FDA's Center for Food Safety and Nutrition (CFSAN). NCFST provides a collaborative environment where scientists from industry, academia, and government pool their scientific expertise and institutional perspectives to proactively resolve

food safety issues. The Center's research has been applied to science-based policy and production processes affecting a wide variety of food safety issues including E. coli in spinach, Salmonella in processed foods, Botulinum in canned foods, and chemical contaminants in foods.

The work of the NCFST is critical to the safety and security of the U.S. food supply. This has been recognized as a basic federal government responsibility since at least the 1930s, when the Federal Food, Drug and Cosmetics Act was first enacted.

For FY09, the base funding is specified at $2.077 million for the Food Center, which is a reduction from the prior year's level of 2.3 million and below the historically specified level of $3 million. An increase to $3.8 million is required to keep pace with the increased demand on the Center's food safety program in an ever more complex and changing global food supply.

***

Northern Illinois University Transportation Energy Program

Request: $1,000,000

Northern Illinois University

400 Altgeld Hall #300

DeKalb, IL 60115

Funding would be used to perform research to develop improved energy efficiencies in ground transportation working as an integrated team with Argonne, Northern Illinois University's College of Engineering and manufacturers (who are either OEMs or component suppliers to the industry).

Project research topics will include: reduced engine friction through use of advanced technology surface treatment, improved rail/wheel friction through passive surface treatments, use of nanoparticles in cooling fluids to reduce radiator size and improve cooling efficiency, structural enhancements to reduce weight while improving recyclability and reducing greenhouse gases, and human factors studies to improve utilization of energy saving technologies.

The project team will also extend the application of bio-based fuels in this area of transportation. A by-product of this

project will be the training of U.S. students to become more effective engineers in terms of understanding how to design systems to be more energy efficient. Thus, as engineers move from the university into industry, they will be able to design more energy efficient products. Most of Northern Illinois University's engineering graduates become employed in transportation related industries.

This represents the second year in which NIU is involved in this type of energy efficiency project. This past year, NIU faculty members started and made gains in the area of energy efficiencies related to the railroad industry, and the second year will allow the NIU researchers to develop new and more advanced approaches.

***

Northwestern University Research Program in Molecular Electronics for Flash Memory Production

Request: $4,000,000

Northwestern University

633 Clark Street

Evanston, IL 60208

The funding would be used to establish an accelerated research program focusing on the development and use of ultra-high-density, three-dimensional memory chips for the fabrication of flash memory devices, to be deployed for surveillance activities and communication in the battlefield.

Northwestern University seeks Congressional support for funding from the U.S. Army, in FY 2010, to establish an accelerated research program focusing on the development and use of ultra-high-density, three-dimensional memory chips for the fabrication of flash memory devices, to be deployed for surveillance activities and communication in the battlefield.

The technology aims to develop devices with working parts no larger than a white blood cell. The program in Molecular Electronics for Flash Memory Production will pursue three significant goals that will result in several key military applications, including:

Flash Memory Production: They propose to construct an ultra-dense flash memory, which can be written with the end of

a 2-volt battery and then eradicated, at will, with light.

Robust Molecular Memory: They are developing ultra-porous, highly crystalline, network materials that represent a revolutionary departure in fabrication, so as to render switchable components more robust and everlasting.

Fundamental Investigations in Molecular Electronics: Their research will allow us to lay the fundamental groundwork for measuring the transport properties of novel molecular electronic components (e.g., switches, diodes, and resistors).

Northwestern University, through its world-renowned International Institute of Nanotechnology (IIN) and recently established Center for Integrated NanoSystems (CINS), is a global leader in the design and fabrication of molecular memory and logic on a nanometer scale for use in communication devices. Over 15 start-up companies, with over $300 million of venture-capital investment, have emerged from IIN inventions, with numerous tools and technologies now finding their way into the marketplace in the U.S. NanoInk, an Illinois company that has raised over $50 million in venture capital, has commercialized a nanotechnological tool, called NScriptor, for doing Dip Pen Nanolithography (DPN). Nanosphere Inc. - another Illinois company spun from Northwestern's research - most recently raised $110 million in a public offering, and has commercialized a suite of low-cost, genetic-testing systems that will enable hospitals to test patients for ailments ranging from heart disease to cancer. An investment in molecular electronics for flash memory production will serve to broaden the scope and influence of the IIN in soldier nanotechnologies.

***

Ogden Avenue Relief Sewer (Phase I from Gordon Park to La Grange Road)

Request: $400,000

Village of La Grange

53 S. La Grange Road

La Grange, IL 60525

The funding would be used for construction of a new sewer to redirect storm water from the existing combination sewer system flow to the deep tunnel - north of Hillgrove Avenue from Edgewood Avenue to Locust Avenue. This would help provide residential flooding relief and reduce overflow impacts.

These improvements will reduce residential flooding impacts and redirect polluted wet weather flow to the Deep Tunnel. The construction of the Ogden Avenue Sewer will provide direct relief for approximately 800 households (including proposed new housing in the vicinity), several businesses, churches and schools.

A best practice objective of the National Pollutant Discharge Elimination System (NPDES) is to reduce the amount of polluted wet weather flow that reaches the combined sewer overflow at Salt Creek. The Ogden Avenue Relief Sewer will redirect the polluted wet weather flow to the Deep Tunnel system, helping to provide residential flooding relief and reducing overflow impacts.

***

Saint Xavier University Library and Learning Center Technology Improvements

Request: $750,000

Saint Xavier University

3700 West 103rd Street

Chicago, IL 60655

The funding would be used to purchase equipment, software and develop facilities for the New Media Center, Library Service and Digital Media Center Upgrades, Computer Lab and Mobile Lab Technologies, and Event Capture and Video Streaming.

The library is the place where information becomes knowledge and where knowledge becomes wisdom. Built to serve several hundred students, the library today serves more than 5,300 undergraduate and graduate students across a breadth of disciplines never dreamed of by Saint Xavier's founders. While it has performed its function admirably for more than fifty years, the facility long ago reached its limitations on space for collection growth, for new and expanding resource functions, and for study needs. In its present form it cannot meet the demands of growing enrollment, expanding curriculum, or the very nature of today's information technology needs.

This project would help meet these growing demands and will become a primary destination for intellectual, social and cultural purposes on the south side of Chicago.

***

Saint Xavier University Science Center and Equipment and Instrumentation Initiative

Request: $1,000,000

Saint Xavier University

3700 West 103rd Street

Chicago, IL 60655

The funding would be used to renovate the existing Science Wing of the Ward Academic Center and provide contemporary and safe science laboratories, advanced classrooms and equipment, and improved research space.

Despite the overall excellence of the education it provides, Saint Xavier University is constrained in the area of science education by its facilities and equipment, which are out of date and unable to capitalize on the changes in science and science education. The University's primary science facility is a 50 year-old building that simply cannot accommodate the technologies required to teach new methods of science. The University is committed to renovating the Science Wing of the Warde Academic Center.

This modernization will address the following:

-Biological laboratories that contain biologically active materials or involve the chemical manipulation of these materials. This includes laboratories that support such disciplines as biochemistry, microbiology, cell biology, biotechnology, immunology, botany, pharmacology, and toxicology.

-Chemical laboratories supporting both organic and inorganic synthesis and analytical functions, and laboratories in material and electronic sciences.

-Animal laboratories for the manipulation, surgical modification, and pharmacological observation of laboratory animals.

-Physical laboratories for physics instruction; they incorporate lasers, optics, nuclear material, high and low temperature materials, electronics, and analytical instruments.

The cost of maximizing the educational potential of the University's science facilities by upgrading laboratories and incorporating technology throughout is staggering. But the high-technology equipment needed to perform and teach new methods of science must be integrated into the renovated facilities or the value of these facilities will never be realized.

The centrality of science and technology in our daily lives has never been greater. Educating future teachers, researchers, clinicians, technologists, public health officials, policy makers, and others is one of the most pressing responsibilities of American higher education today. With the rapid changes occurring in the sciences, students entering college in 2009 will have opportunities to work in areas of science and technology that haven't even been developed yet. Exposing these students to state-of-the-art science facilities and equipment will provide them with a strong incentive to explore all avenues available in the science professions.

Saint Xavier University is committed to advancing the scientific training of a new generation of undergraduate students. However, success in meeting the national need for individuals with the potential to lead a scientific renaissance depends on the University's ability to strengthen its scientific curricula and enhance student engagement in the sciences. To do so, it is imperative that Saint Xavier modernize and expand its science facilities for teaching and research.

***

Science Storms

Request: $1,500,000

Museum of Science and Industry

57th Street and Lake Shore Drive

Chicago, IL 60637

The funding would be used for the development and public outreach associated with its new iconic exhibit, Science Storms. The exhibit will utilize fascinating exhibitry, including an indoor four-story tornado, a contained lightning exhibit, and a 20' diameter avalanche to teach basic principles of physics, chemistry, materials science, motion and forces. Public outreach for Science Storms includes multiple daily science demonstrations within the exhibit, curricula integration into after-school programs in Chicago communities, programming for students who visit the Museum as part of a class, and multiple programs at the Museum for school-aged children.

Illinois is privileged to have two Department of Energy National Laboratories conducting research in the state: Argonne and Fermi. The Museum currently is collaborating with scientists at Fermi and Argonne National Laboratories. Science Storms will leverage the knowledge and research from Argonne and Fermi to bring cutting-edge research and emerging science to the Museum. By showcasing the significant work accomplished at Argonne and Fermi, the exhibit will increase visibility for the labs, and will provide a more substantial learning experience for our visitors of all ages.

The National Science Teacher Association's Position Statement on Informal Science Education notes that, "A growing body of research documents the power of informal learning experiences to spark curiosity and engage interest in the

sciences during school years and throughout a lifetime" (NSTA, 1999). Focused student experiences at Museums have been shown to complement, deepen and enhance classroom science studies. Museum field trips and special student programs provide students with access to role models in the sciences, as well as opportunities for authentic science study not typically available in traditional classroom settings.

Student experiences at the Museum are designed in accordance with National Science Education Standards to narrow the scope of the field trip experience to focus on specific curriculum areas, using strategies that appeal to a wide range of learners. With this, results of the 2005 National Assessment of Educational Progress (NAEP) Science exam indicated that 70 percent of Illinois 4th and 8th graders lack basic knowledge in the earth, physical and life sciences (U.S. Department of Education, 2006). These scores indicate that Illinois students are trailing the national average and that student science performance continues to decline. In an era of high stakes testing and increased focus on learning standards, teachers need additional support to effectively meet the needs of their diverse student body. The public outreach the Museum of Science and Industry can provide in connection with the Science Storms exhibit will become a source of support to meet such needs.

***

Shedd Aquarium's Great Lakes Awareness Program

Request: $750,000

Shedd Aquarium

1200 South Lake Shore Drive

Chicago, IL 60605

The funding will be used to help sustain and strengthen science-based conservation programs for area students.

The education staff at Shedd Aquarium is dedicated to helping learners understand and think critically about the issues facing the Great Lakes. Due to the demands on the curriculum, teachers are often unable to include science-based conservation and stewardship instruction during the school day. Shedd education will focus on reaching youth and their families during out-of-school time to fill that gap and provide additional science education in a fun and engaging way in order to create a complimentary and robust science program in communities throughout the Chicago area. They will build upon a partnership begun last year with scouting groups to provide a comprehensive out-of-school time experience for these youth focusing on issues of conservation, water resources and local stewardship. Activities will include educational workshops in the scouts' communities and at Shedd Aquarium, engaging overnight experiences for the troops and their families to better understand the interconnectedness of the world's waterways, and stewardship projects in their local natural spaces.

The Great Lakes are facing habitat loss and shoreline degradation, water loss and diversion, declining water quality, onslaughts of invasive species and a lack of public understanding and awareness of these problems.

Launched in 2005, Shedd Aquarium's Great Lakes conservation program raises awareness of Great Lakes issues and inspires action by integrating all the ways that Shedd Aquarium communicates with the public. These communication pathways include:

-The "Listen to your Lakes" awareness campaign and website

-Exhibits, such as the Great Lakes Invasive Species exhibit

-Educational programs

-Community outreach

-Proactive and reactive public relations opportunities

-Networking and collaborating with colleagues from governmental agencies and non-governmental organizations

***

Sidewalk Replacement, Merrionette Park, IL

Request: $200,000

Village of Merrionette Park

11720 Kedzie Avenue

Merrionette Park, IL 60803

The funding would be for the removal and replacement of deteriorated sidewalk throughout the village.

The proposed construction would consist of the removal and replacement of deteriorated concrete sidewalk throughout the village. New sidewalks would improve the safety of area residents, and support the everyday needs of the community.

***

South Fork, South Branch, Chicago River (Bubbly Creek), IL

Request: $1,000,000

U.S. Army Corps of Engineers (Chicago District)

111 N. Canal StreetChicago, IL 60606-7205

Funding would be used for the Army Corps to continue work on a feasibility study for restoration of Bubbly Creek, a contaminated segment of the Chicago River located in an area that is undergoing extensive residential and commercial redevelopment.This project will help inform future projects aimed at restoration of contaminated sediment. The project is occurring on a federal navigable waterway. As a result, it fits squarely within the jurisdiction and responsibility of the Corps.

***

Southwest Central Dispatch 9-1-1 facility upgrade

Request: $2,325,000

Southwest Central Dispatch

7611 West College Drive

Palos Heights, IL 60463

The funding would be used to support technology upgrades at an overburdened 9-1-1 call center that services over 250,000 Illinois residents.

Southwest Central Dispatch is a regional emergency communication center providing 9-1-1 service to multiple city police and fire departments and fire protection districts. The center provides 9-1-1 service for a service population of 250,000 people and is the backup 9-1-1 facility to the Cook County Sheriff and District 19 MABAS which increases the service population to over 3,000,000 people. This project is a good use of taxpayer resources because the overburdened facility is in need of various technological and other upgrades in order to adequately provide for the safety and security of the citizens of southwest Chicago.

***

Stone Avenue Train Station, La Grange IL

Request: $500,000

Village of La Grange

53 S. La Grange Road

La Grange, IL 60525

The funding will be used to upgrade the historic Stone Avenue Train Station, including new roofing, gutters, windows and accessibility upgrades. A new "kiss and ride" area is also planned along with improved bicycle facilities.

Built in 1901, the Stone Avenue Train Station is a historic, iconic structure serving an average of over 900 commuters daily. The condition of the Stone Avenue station, outbound shelter and surrounding areas have deteriorated over time and require a comprehensive renovation which the Village of La Grange has undertaken along with BNSF and Metra. The scope of work includes new roofing, gutters, facia, tuckpointing, windows and accessibility and other upgrades. A new "kiss and ride" area is also planned along with improved bicycle facilities.

Maintaining and investing in our commuter rail transportation system is integral to quality of life, environmental impact mitigation and economic development throughout the nation's urban and suburban centers. Successful communities require a rail system that includes quality, dependable and accessible commuter train station facilities. In addition to providing rail services to a substantial amount of commuters on a daily basis, the Stone Avenue Train Station is a historic and architecturally significant structure worth preserving for future generations.

***

Village of La Grange, Police Department

Request: $100,000

Village of La Grange

53 S. La Grange Road

La Grange, IL 60525

The Village is preparing for the next technological phase of emergency 9-1-1 services called "Next Generation" or NG 911. NG 911 software and hardware technology upgrades will display and answer emergency calls from all types of devices in the future -including text messages and streaming video. The system will also interface with a digital mapping system allowing for the ability to precisely pinpoint the location of a call for assistance and provide for an additional dispatch workstation (PSAP) to handle call overflow.

As technology continues to advance, emergency dispatch centers must be prepared to handle calls for service from all different types of electronic communications including cellular telephone calls, text messages, and video streaming. Upgrades to emergency identification and response systems enhance public safety and further national 9-1-1 program capabilities and objectives.

***

Village of La Grange Park, Police Department

Request: $75,000

Village of La Grange Park

447 N. Catherine Avenue

La Grange Park IL, 60526

The funding would enhance public safety through the purchase of upgraded equipment needed to enhance the department's interoperability capabilities.

This project consists of procuring the necessary equipment to enhance the department's interoperability capability to communicate with other agencies when responding to calls requiring a joint presence or action. This equipment includes several in-car video cameras with the capability to stream directly to the Cook County Emergency Operations Center, in-car radios with sufficient channels to provide interoperability, interoperable hand held radios carried by each officer, and the associated computer servers and ancillary equipment.

***

Village of Oak Lawn, Police Department

Request: $200,000

Village of Oak Lawn

9446 South Raymond Avenue

Oak Lawn, IL 60453

Oak Lawn seeks to acquire and deploy village-wide camera systems and associated hardware to permit first responders to view and access interior and exterior camera system data during emergencies. Cameras are place today are in Oak Lawn schools, the train station, parking garage, and key intersections but they are not linked to personal computers in police vehicles. Acquisition and installation of this equipment will enhance public safety and emergency response as officers in the field will be able to view and assess various situations from their police vehicles, allowing for improved assessment of developing situations and faster response for public safety and crime prevention.

***

Water and Stormwater Improvement Project for 111th and Cicero Avenue

Request: $500,000

Village of Oak Lawn

9446 South Raymond Avenue

Oak Lawn, IL 60453

The funding would be used to provide a new creek with stable banks and planting at Stony Creek and would provide important assistance for the prevention, reduction, and elimination of water pollution.

As part of the TIF mixed use development project in the Village of Oak Lawn at 111th and Cicero Avenue, an extensive environmental restoration and stormwater management infrastructure improvement is required. Oak Lawn has partnered with the Metropolitan Water Reclamation District of Greater Chicago and their engineering consultants CH2MHILL and Burke Engineering to make these improvements.